ſio fuit 9^h 27′ 53″ in recta cum Galilæo, & Lansbergio. Emerſio verò 10^h 24′ 17″ in recta cum Macrobio & Soſigene.

Mart. die 21 Veſp. occultavit Luna Stellam γ *Cancri*. Immerſio fuit 8^h 14′ in recta per Copernicum & Boreum marginem Langreni. Emerſio fuit neglecta.

Maii die 24 Summo Mane 1^h 51′ 30″ Luna abſorbuit Stellam τ *Scorpionis* proxime Byrgium. Emerſio non fuit obſervata.

Sept. die 14 Veſp. Luna occultavit Stellam η *Capricorni*. Immerſio fuit 8^h 11′ 20″ inter Seleucum & Cardanum. Emerſio 9^h 37′ 30″ paulo infra Langrenum.

Die 19 Veſp. Luna obtexit Stellam δ *Piſcium*. Immerſio fuit 8^h 43′ 45″ in recta per Tychonem & Langrenum. Emerſio autem 9^h 5′ 15″ in recta cum Tychone & Keplero.

Oct. die 28 Manè Luna occultavit Regulum, ſeu Cor *Leonis* Immerſio fuit 1^h 39′ 50″ in recta per Ariſtarchum & Gaſſendum. Emerſio 2^h 11′ 15″ in recta per Ariſtarchum & Cardanum.

V. *An Account of the Veins and Arteries of* Leaves. *By* Frank Nicholls, *M. D. Præl. Anat.* Oxon. *F. R. S.*

BY a Letter from Dr. *Fuller* in *Holland* to the Preſident, and communicated about *October* laſt, the Society was informed, that the ingenious Profeſſor *Ruyſch* had obſerved ſomething in the diſſecting of Leaves analogous to the Veins and Arteries of Animals; but without explaining in what Manner theſe different Veſſels were diſpoſed, or by what Means they may be diſtinguiſhed from each other.

When

When I had the Pleaſure of examining the Collections of *Frederick Ruyſch* and *Albert Seba* at *Amſterdam*, in both which were great Variety of diſſected Leaves, they made no Mention of ſuch Diſcovery; although in a Leaf from the Collection of *Ruyſch* I could (with a Glaſs) obſerve the Fibres to be double towards the Edges of the Leaf; which at that Time I imagined to be an unnatural Diviſion of the Fibres, as in decayed Sticks.

In the mean Time, *Albert Seba* having communicated the Method of diſſecting Leaves to the Society, by a Letter to the Preſident, I ſeparated the pulpous from the fibrous Parts of ſeveral Leaves after his Method; when examining them by Glaſſes, and in Water, I found that each Fibre was naturally ſeparated into two diſtinct Fibres by a thin *Stratum* of the pulpous Subſtance; and that this Separation was continued through all the Fibres and Stem of the Leaf, ſo as to form two diſtinct Planes of ſimilar Net-work.

Though this Duplication of the Veſſels in Leaves ſeems to point out an Analogy between them and the Veins and Arteries of Animals, yet I ſee no probable Means of gueſſing which are the arterial and which the venal Fibres.

That I might illuſtrate this Matter, as it appeared to me, I have prepared two Leaves, the one of an Apple, the other of a Cherry; in which, as well the Separation of the Fibres and Stem, as the pulpous Subſtance, by which they are naturally ſeparated, are very obvious. *See Plate* II. A *the Cherry-Leaf*; B *the Apple-Leaf, whoſe Planes are ſeparated.*

Both which (the Society having nothing of this Nature in their Repoſitory) I deſire may be accepted as a Mark of the Reſpect of their

Moſt Humble Aſſociate,

June 11, 1730. F. NICHOLLS.

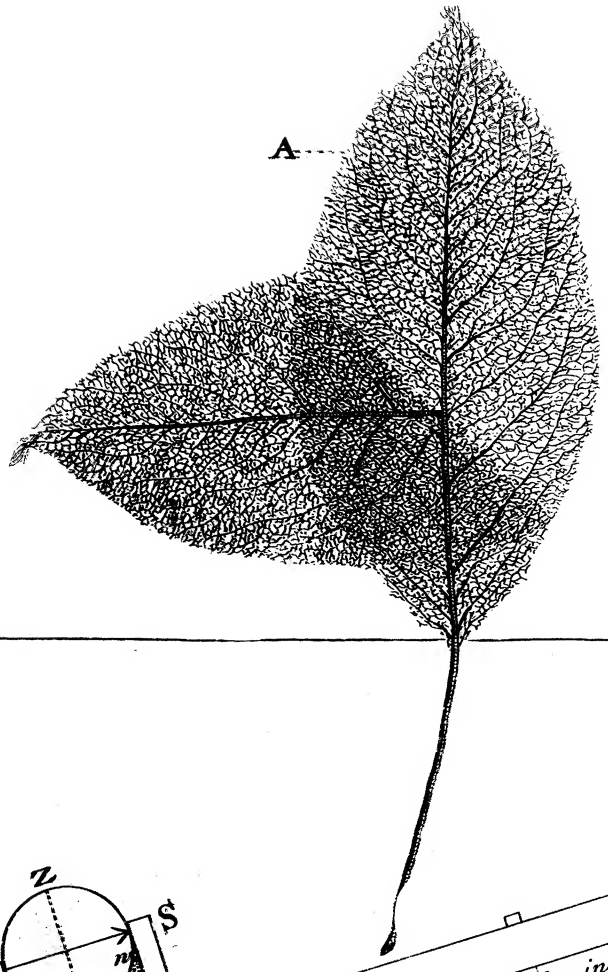
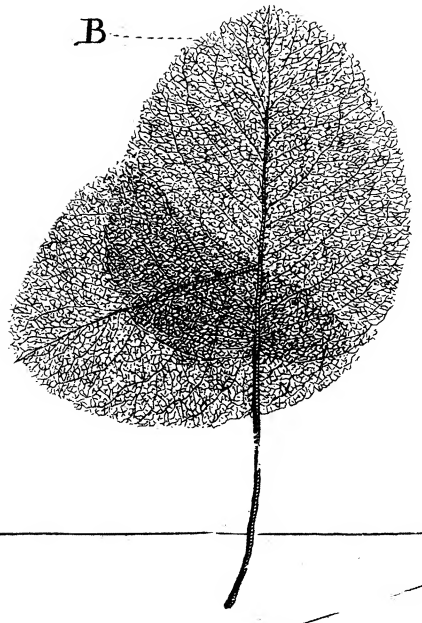

A

Fig. 11.


B

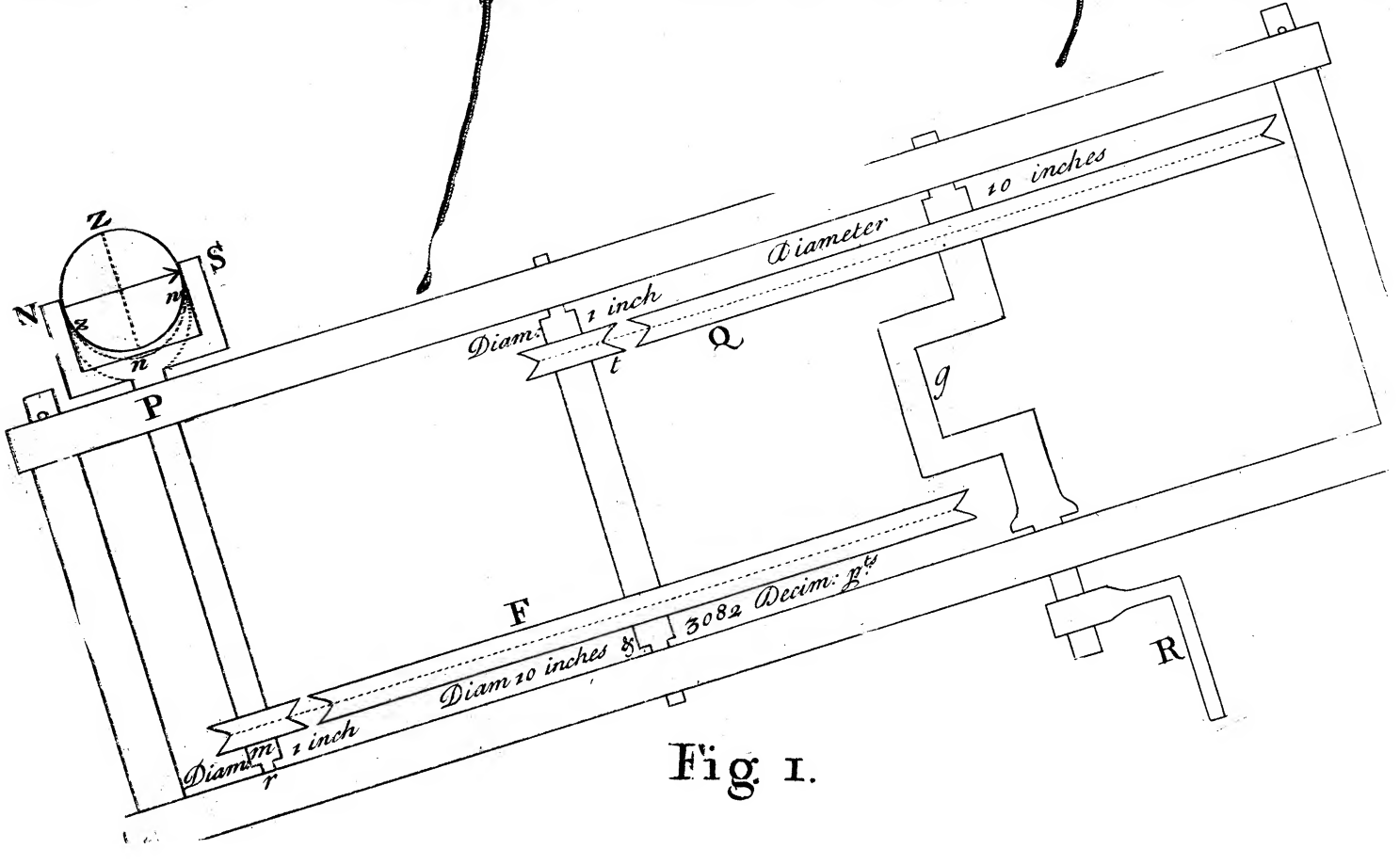

Z
S
N
P
Diam:
1 inch
Diameter
10 inches
Q
t
g
F
3082 Decim: pts
Diam 10 inches
Diam:
1 inch
R

Fig. 1.